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10/005,188	12/04/2001	Phil Glynn	2267.574US02	6936

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EXAMINER

CASTELLANO, STEPHEN J

ART UNIT	PAPER NUMBER
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3727

DATE MAILED: 02/10/2004

13

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/005,188

Applicant(s)

GLYNN ET AL.

Examiner

Stephen J. Castellano

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 November 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All   b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)                      4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)                      5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_                      6) ☐ Other: \_\_\_\_\_

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The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 10, 13 and 14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 10 recites the limitation "said two parts of kinematic coupling" in the last two lines of the claim. There is insufficient antecedent basis for this limitation in the claim because it can't be determined which two of the three parts applicant has mentioned, "one part of a kinematic coupling" introduced in lines 4 and 5 of claim 10, "the cooperating part of another part of said kinematic coupling" introduced on line 6, or the "another part of said kinematic coupling" introduced on line 6. Also, claim 10 recites the limitation "the cooperating part" in line 6. There is insufficient antecedent basis for this limitation in the claim.

Also, the configuration claimed in claim 10 seems implausible. The two parts of the kinematic coupling include (1) a machine interface comprising three grooves positioned at the bottom of a container portion ( a part of the wafer container) and (2) the adaptor plate at the top of a wafer container comprises the cooperating part of another part of the kinematic coupling. These two parts are separated by the wafer container / container portion. Therefore, the two parts can't be intermediate each adjacent pair of wafer containers / container portions.

If the machine interface at the bottom of an upper adjacent wafer container /container portion is claimed as one part of the coupling and the adaptor plate at the top of a lower adjacent wafer container/ container portion is claimed as a second part of the coupling, then the

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coupling's two parts would be intermediate the upper adjacent and the lower adjacent wafer containers /container portions.

Claim 13 recites the limitation "the adaptor plates" in line 7. There is insufficient antecedent basis for this limitation in the claim because there is no indication that more than one plate exists.

Claim 13 recites the limitation "the carrier portion" in line 7. There is insufficient antecedent basis for this limitation in the claim.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 4, 6 and 8-10 are rejected under 35 U.S.C. 102(e) as being anticipated by Fujimori et al. (Fujimori).

For claims 1, 4, 6, 8 and 9, Fujimori discloses a wafer container system comprising:

a container portion with an open front, a top and a bottom;

a door for closing the open front;

a machine interface (V-grooves 4) on the bottom of the container portion, the machine interface having a first configuration;

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a receptacle portion (that which surrounds threaded boss 19, both the recess formed around boss 19 inside of guide rails 18 and guide surfaces 20 and guide rails 18 having an inversely L-shaped cross section) on the top of the container portion; and

a stacking adaptor plate (14) for releasable engagement with the container portion at the receptacle portion (the adaptor plate is inherently capable of being brought into releasable engagement with the receptacle portion by means such as another adaptor which engages both the adaptor plate and the receptacle portion), the adaptor plate configured to cooperate with a machine interface with the first configuration, the plate having three rounded projections (oval guide members 15) which act as three container portion contact portions.

For claim 4, oval guide members 15 each act as an upwardly facing kinematic coupling portion.

For claim 6, oval guide members 15 define at least three rounded projections comprising one portion of a kinematic coupling.

For claims 8 and 9, Fig. 2 and 4 show that bottom plate 14 has three legs extending horizontally and spaced equally from one another with a rounded projection on each leg.

For claim 10, rotate the container shown in Fig. 2 so that the top becomes the bottom. The rotated Fig. 2 discloses a wafer container comprising a container portion having a plurality of slots therein for holding a plurality of wafers, the container portion further comprising a top, a bottom, a machine interface (grooves positioned between ribs (unlabeled) of the former top which extend parallel with the front face) positioned at the bottom, and a stacking adaptor plate (14) at the top of the wafer container, the machine interface comprising three grooves (there are four grooves which extend between the ribs of the former top, another groove could be

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associated with the area directly surrounding boss 19) as one part of a kinematic coupling, the adaptor plate comprising at least three rounded projections (15) comprising the cooperating part of another part of said kinematic coupling (the adaptor plate is inherently capable of being coupled for engagement to the three grooves of the machine interface by means of another coupling which engages the grooves and the rounded projections), whereby a plurality of pairs of said wafer containers may be stacked together with said two parts of kinematic coupling intermediate each said adjacent pair of wafer containers.

Claims 4, 5 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Betsuyaku.

For claims 4, 5 and 7, Betsuyaku discloses a stacking adaptor plate (15) for stacking wafer containers, the containers (1A, see Fig. 7) each having a top and a bottom with a kinematic coupling (both the flat surfaces of the top since the container may be inverted and the positioning means 4 and positioning ribs 5 on the bottom are inherently capable of being a kinematic coupling since suction cups or adhesive materials can attach to a flat surface) thereon, the adaptor plate is adapted to fit on the top of the wafer container (both when inverted and when in the upright configuration shown in Fig. 7 since the plate is inherently capable of being removed from the bottom and another adaptor can be used to attach the plate to the top through the use of suction cups or adhesive) to facilitate stacking of the wafer containers, the adaptor plate has an upwardly facing kinematic coupling portion (when the stacking adaptor plate is inverted, end face 10, guide face 11 and lowermost point 10a or when in upright configuration, the upwardly facing guide member 9A), the adaptor plate has a detent (recessed portion 17).

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujimori in view of Betsuyaku.

Fujimori discloses the invention except for the detent and the releasable engagement. Betsuyaku teaches detent 17. It would have been obvious to add a detent to modify the attachment such that more than a lifting force must be applied to detach the stacking adaptor plate from the container portion to prevent inadvertent detachment.

Claims 1-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujimori in view of Johnson.

Fujimori discloses the invention except for the engagement of the anchor plate to the top of a container portion there below and the stack of wafer carriers. Johnson teaches a stack of wafer carriers (see Fig. 7A-D). Johnson teaches a wafer carrier including a container portion (top cover 12 and disc box 14) and an adaptor plate (bottom cover 16), the adaptor plate engages the top (top cover 12) of the container portion immediately there below by a detent (at 70) and an associated recess (at 72), the detent projects downwardly for removable attachment to the wafer carrier / container portion there below. It would have been obvious to stack the wafer carriers as motivated by the conservation of storage area or space thereby achieved (i.e. compact storage). It would have been obvious to add a detent and associated recess to the underside of an adaptor plate to provide the sought after stable stackability as motivated by the restricted movement in both the longitudinal, horizontal and transverse, horizontal directions that the detent / recess provides. It would have been further obvious to modify the detent / recess to have a

corresponding shape as the top (as the top of Johnson has a projection (at 92)) as motivated by the ease with which the user can identify the stacking and engaging features in aligning the carriers for compact storage.

Applicant is advised that should claim 5 be found allowable, claim 7 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Applicant's arguments filed November 28, 2003 have been fully considered but they are not persuasive.

It is noted that applicant has not amended the claims to now include the word "releasable," as the "releasable engagement" was present in the amendment submitted May 28, 2003 as paper No. 7.

In response to applicant's argument with respect to the anticipatory rejection of claims 1, 4, 6 and 8-10 with Fujimori that a releasable engagement has not been shown, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963). The bottom plate is detachably fixed to the bottom surface and inherently capable of performing the intended use function.



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In response to the comments made with respect to the anticipatory rejection of claim 10 with Fujimori and the anticipatory rejection with Betsuyaku that the Office action cannot improperly and arbitrarily reorient the wafer container, no basis for applicant's position has been given.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the examiner has mentioned that the plate should remain attached with a strength which is greater than a lifting force since a force equal to the weight of the plate and/or the container should not be sufficient to detach the plate and wafer container. Applicant's attention is directed to column 12, lines 12-15 of Betsuyaku which states, "since engaging recessed portions 17 and engaging projected portions 16 are adapted to fit each other it is obviously possible to further firmly fit bottom plate 15 to container body 1A," as a further explicit teaching of obviousness.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen J. Castellano whose telephone number is 703-308-1035. The examiner can normally be reached on M-Th 6:30-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lee W. Young can be reached on 703-308-2572. The fax phone numbers for the

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organization where this application or proceeding is assigned are 703-872-9302 for regular communications and 703-872-9303 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1148.

  
Stephen J. Castellano  
Primary Examiner  
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sjc